

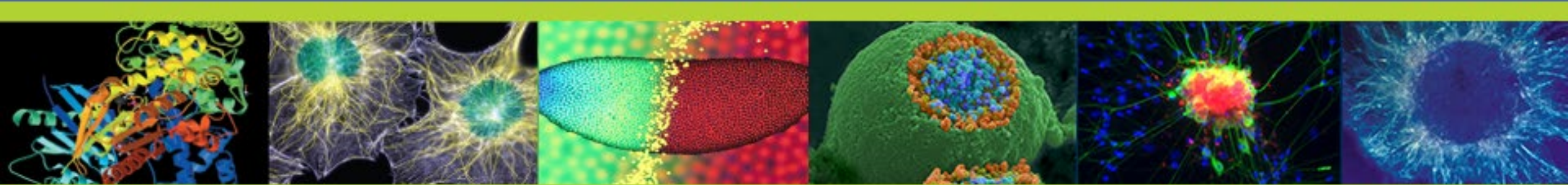


National Institute of
General Medical Sciences



Fellowships and Career Development Awards at NIGMS

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Brief Overview of NIH & NIGMS

There are 27 NIH Institutes and Centers (ICs)

NCI	NEI	NHLBI
NHGRI	NIA	NIAAA
NIAID	NIAMS	NIBIB
NICHD	NIDCD	NIDCR
NIDDK	NIDA	NIEHS
NIGMS	NIMH	NIMHD
NINDS	NINR	NLM
CC	CIT	CSR
FIC	NCATS	NCCIH
OD		

- Focus varies
 - Some are disease, life stage, or organ system focused
 - Basic and applied sciences
 - NIGMS - research on basic biological processes & translational and clinical research in certain areas
- Some researchers are funded by both NSF and NIH
- NIH determines to which IC an application will be assigned to and could therefore be funded by
 - **Make sure the IC(s) the application will likely be assigned to participates in the funding opportunity the investigator is applying to!**
 - It is highly encouraged to contact a Program Officer (PO) before submitting

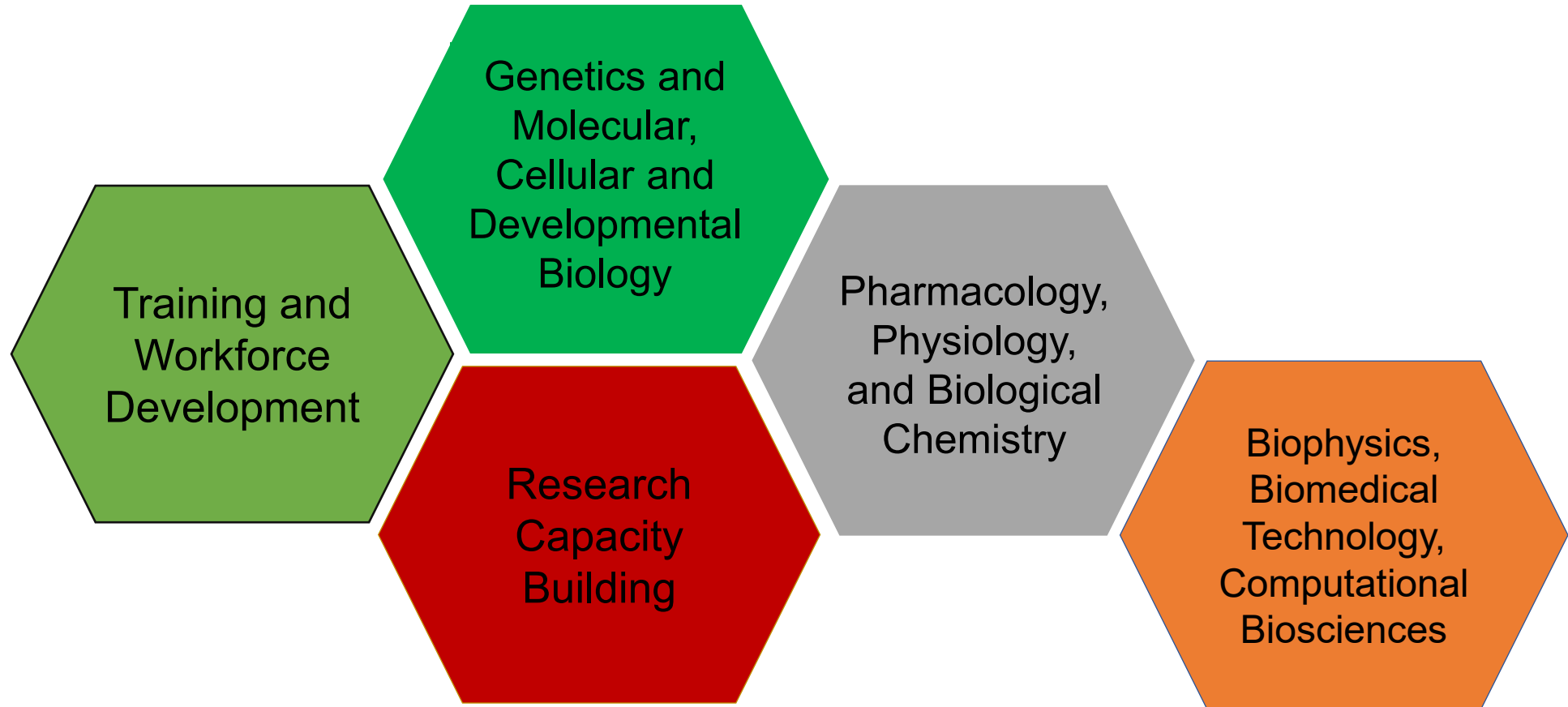
NIGMS at a Glance

- NIGMS is the fifth largest (in terms of budget) of NIH's 27 institutes and centers
- NIGMS' main scientific focus is fundamental (basic) research
 - Also a few clinical research areas of responsibility, including anesthesia, injury and sepsis
- NIGMS has the largest training, workforce development, diversity and research capacity building portfolios at NIH
- Fiscal Year 2023 NIGMS appropriation was \$3.239B

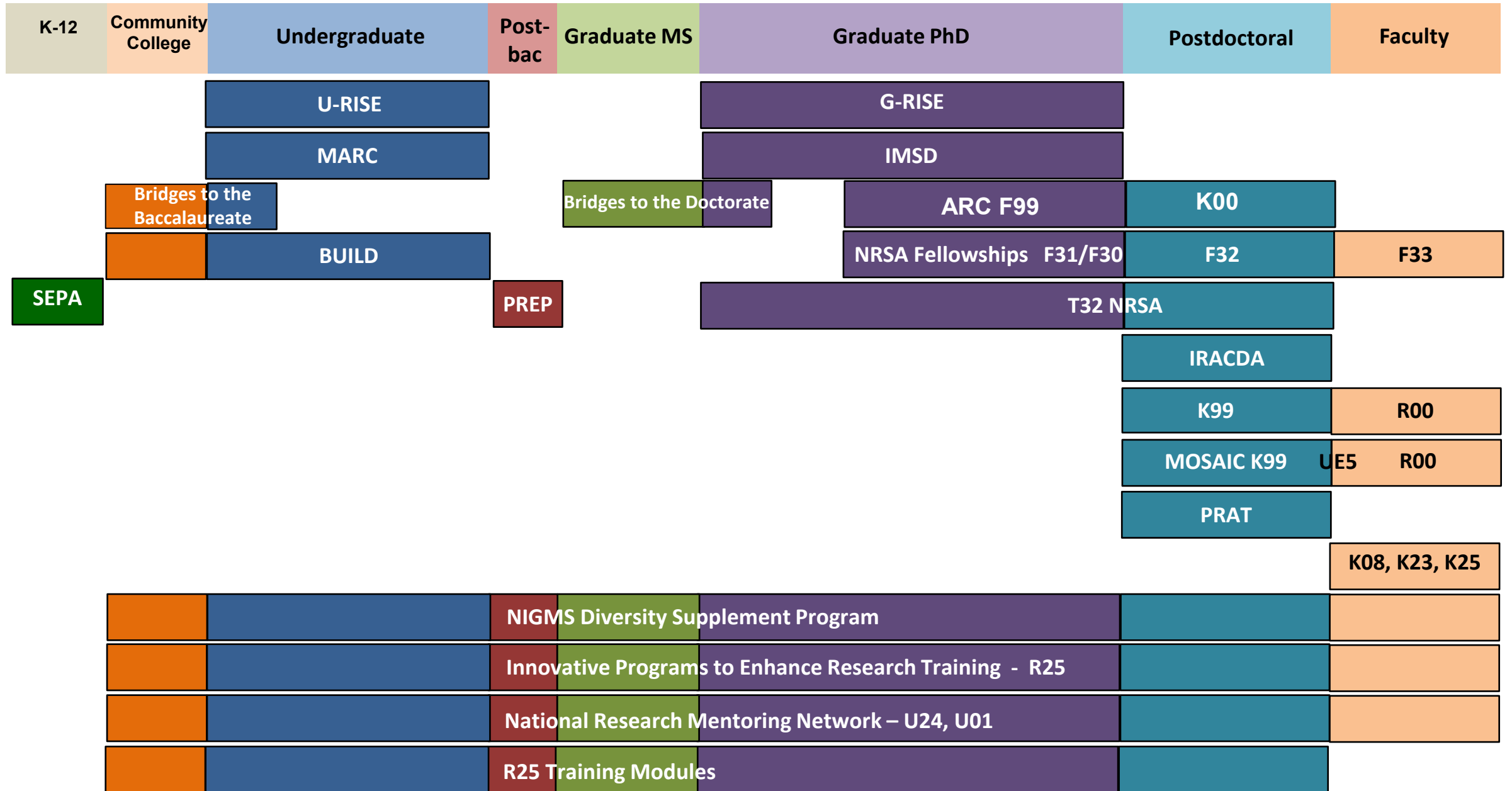
<https://www.nigms.nih.gov/about-nigms/who-we-are/overview>



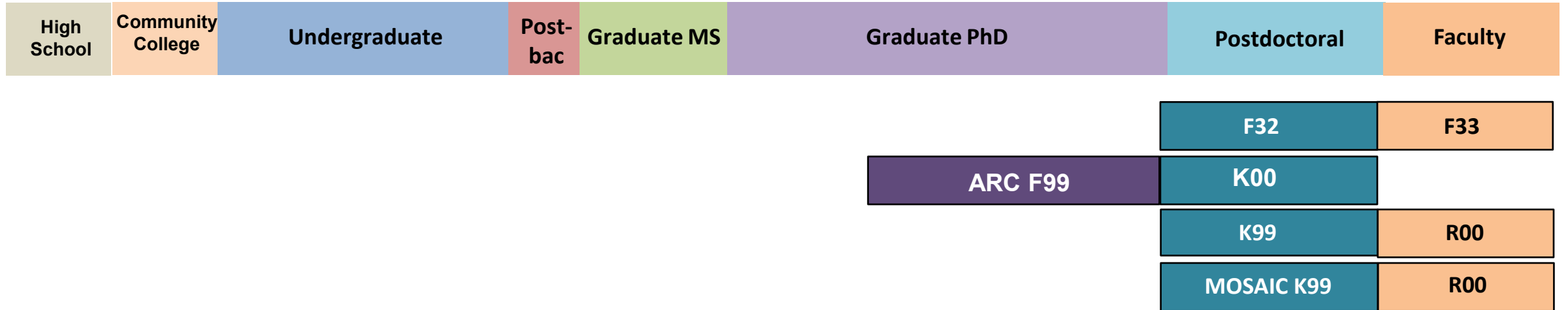
NIGMS Scientific Divisions



Training, Workforce Development, and Diversity (TWD) Programs



Getting started with an individual award – Are you ready?



Do you have:

- A research sponsor?
- A feasible scientific project that addresses a need or barrier in biomedicine?
- Strong training potential in the current research environment?
- Plans for a career as a research scientist?

Visit the NIH Webpage for Parent NOFOs

<https://researchtraining.nih.gov/programs>



Division of Biomedical Research Workforce

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Programs

Institute/Program Matrix

Resources

Training

Fellowships

Career Development

Other Training-Related

Programs

[RTCD Home](#) > [Programs](#)



Training

To provide institutional research training opportunities (including international) to trainees at the undergraduate, graduate, and postdoctoral levels

- [D71](#) International Research Training Planning Grant
- [D43](#) International Research Training Grants
- [T15](#) Continuing Education Training Grants
- [T32](#) Institutional National Research Service Award



Fellowship

To provide individual training opportunities (including international) to supported fellows at the undergraduate, graduate, postdoctoral, and senior career levels

- [F05](#) International Research Fellowships (FIC)
- [F30](#) Individual Predoctoral NRSA for MD/PhD Fellowships
- [F31](#) Predoctoral Individual National Research Service Award
- [F32](#) Postdoctoral Individual National Research Service Award



Career Development

To provide individual and institutional career development opportunities to supported candidates at the postdoctoral, early career, and mid career levels.

- [K01](#) Research Scientist Development Award - Research
- [K02](#) Research Scientist Development Award
- [K05](#) Research Scientist Awards
- [K06](#) Research Career Awards



Read the Funding Announcement

Department of Health and Human Services

Part 1. Overview Information

Participating Organization(s)

National Institutes of Health (NIH)

Components of Participating Organizations

National Cancer Institute (NCI)
National Eye Institute (NEI)
National Heart, Lung, and Blood Institute (NHLBI)
National Human Genome Research Institute (NHGRI)
National Institute on Aging (NIA)
National Institute on Alcohol Abuse and Alcoholism (NIAAA)
National Institute of Allergy and Infectious Diseases (NIAID)
National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS)
Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD)
National Institute on Deafness and Other Communication Disorders (NIDCD)
National Institute of Dental and Craniofacial Research (NIDCR)
National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)
National Institute on Drug Abuse (NIDA)
National Institute of Environmental Health Sciences (NIEHS)
National Institute of Mental Health (NIMH)
National Institute on Minority Health and Health Disparities (NIMHD)
National Institute of Neurological Disorders and Stroke (NINDS)
National Institute of Nursing Research (NINR)
National Library of Medicine (NLM)
National Center for Complementary and Integrative Health (NCCIH)
Division of Program Coordination, Planning and Strategic Initiatives, Office of Research Infrastructure Programs (ORIP)

Special Note: Not all NIH Institutes and Centers participate in Parent Announcements. Applicants should carefully note which ICs participate in this announcement and view their respective areas of research interest and requirements at the [Table of IC-Specific Information, Requirements, and Staff Contacts](#) website. ICs that do not participate in this announcement will not consider applications for funding. Consultation with NIH staff before submitting an application is strongly encouraged.

Funding Opportunity Title

Ruth L. Kirschstein National Research Service Award (NRSA)
Individual Predoctoral Fellowship (Parent F31)

Not all participate
NIGMS no longer participates in any of F31 NOFOs after April 9, 2024

Individual Awards for Postdoctoral Fellows



Individual Postdoctoral National Research Service Award (NRSA) (Parent F32)

To support **postdoctoral fellows** to receive advanced and specialized training in basic and/or clinical research through an intensive, mentored research project experience that encourages the development of independence, innovation and creativity in a highly productive research setting.

Individual Senior NRSA Fellowships (Parent F33) – very few

To allow **established independent investigators** make major changes in the direction of their research careers by providing them with opportunities to spend a short period of time training with an appropriate sponsor.

F32 - Ruth L. Kirschstein Postdoctoral Individual National Research Service Award (NRSA)

- **Eligibility:** US citizens or permanent residents with research or clinical doctoral degree
- **Apply** during the last months of your predoctoral training (once identified your postdoc lab) or in the first year of your postdoctoral training
- Your **postdoctoral institution** submits an application for you even if you are not there yet
- **Length of award:** postdoctoral NRSA training is limited to 3 years (time on T32+F32)
- NIGMS policy on length of award: *3 years minus any time that the fellow has already spent in the sponsor's laboratory at the time of the award*
- Award includes stipend, tuition and fees, and institutional allowance
- **PA-23-262**



Writing a Good Application

- Training component is as important as research component
- Identify skills, conceptual approaches, etc., to be learned or enhanced during the award.
- Training plan proposed by the fellow should match that proposed by mentor
- Include mode and frequency of interaction with mentor(s) and collaborators. Include logistics of group and 1:1 interactions keeping all on the same page
- Don't forget career development activities
- 3 to 5 reference letters submitted separately by referees. Referees should not be directly involved in the application

Pathway to Independence Award K99/R00



- Goal: To facilitate *transition* from a mentored postdoctoral research position to an independent research position with *independent NIH research support* at an earlier stage than the current norm

- **PA-24-194**

NIH National Institute of General Medical Sciences

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[Training, Workforce Development, and Diversity](#) > [Career Development Awards](#) > Pathway to Independence Awards (K99/R00)

NIGMS Home | Pathway to Independence Awards (K99/R00)

Pathway to Independence Award K99/R00 - details

- Supports 75% protected time in two distinct phases.
 - K99 1-2 years of mentored support to postdoctoral fellows
 - R00 up to 3 years of independent support contingent on the candidate securing an independent research position
- Eligibility
 - **No U.S. citizenship requirement for applicants to the parent K99/R00**
 - Must apply within 4 years of attaining PhD or completing clinical training (limited extensions granted on a case-by-case basis)
- NIGMS recommends applying during your third postdoctoral year

Demonstrate the need for training

- The strongest applicants will require a well-conceived plan for 1–2 years of substantive mentored career development activities that will help them:
 - become competitive candidates for tenure-track faculty positions
 - launch independent research programs.
- Those who cannot provide a compelling rationale for additional mentored career development are not strong candidates
- Proposed fields of training correspond to research in the K99 phase, not R00 phase
- Career development training
 - Networking
 - Oral presentations
 - Mentoring students
 - Learning about faculty job (lab management, hiring, department structure, etc)
 - grant and paper writing
 - teaching
 - leadership (group within lab, outreach)
- **Do not start job search prior to receiving an award**

Demonstrating Independence

Candidate

- Describe relationship between the mentor's and the candidate's research
- Plans to separate scientifically from mentor and advance to research independence

Mentor

- Plan for transitioning the candidate to the independent phase and a description of how he/she will help the candidate achieve independence
- Statement identifying the components of the proposed research that the candidate can take when he/she transitions to independent position
- Statement affirming any resources and reagents that can be taken by the applicant to the independent phase of the award, when appropriate

MOSAIC K99/R00

- **Maximizing Opportunities for Scientific and Academic Independent Careers (MOSAIC) Postdoctoral Career Transition Award to Promote Diversity**
- Facilitate transition of promising postdoctoral researchers from diverse backgrounds, for example, individuals from groups [underrepresented in the biomedical research workforce at the faculty level](#), into independent, research-intensive faculty careers.
- Overarching goal of the NIH MOSAIC program is to enhance the diversity of independent investigators conducting research within the NIH mission. Program priority is to address documented underrepresentation at the faculty level (e.g., see [NIH's Notice of Interest in Diversity](#)).
- **Eligibility: US citizens and permanent residents**
- Grantees participate in cohorts organized by scientific societies that received a UE5 award
- **PAR-24-225. Recent webinar and slides are available at:**

<https://www.nigms.nih.gov/training/careerdev/Pages/MOSAIC.aspx>

NIH MOSAIC Program (2)

Postdoctoral Career Transition Award (K99/R00) – [PAR-24-225](#), [-226](#), and [-227](#)
Institutionally Focused Research Education Cooperative Agreement (UE5) – [PAR-24-224](#)

MOSAIC K99/R00 Candidates



MOSAIC K99/R00 Scholars Participate in Cohorts Organized by UE5 Awardees



<https://www.nigms.nih.gov/training/careerdev/Pages/MOSAIC.aspx>

MOSAIC UE5 – Common Elements

- Cohort Formation
- Skills Development
 - Faculty search, lab management
 - Grant writing
 - Communication & scientific publishing
- Mentoring and Networking
- Career Visibility & Enhancement



[ASBMB MOSAIC](#)



[FASEB MOSAIC](#)



[AAMC MOSAIC](#)



[ASCB MOSAIC](#)



[ASM MOSAIC](#)

New Program

Advancing Research Careers (ARC)
Predoctoral to Postdoctoral Transition
Award to Promote Diversity (F99/K00 -
Clinical Trial Not Allowed)

PAR-23-222

Advancing Research Careers (ARC)

Institutionally-Focused Research Education Award (UE5): PAR-23-221

Predocutorial to Postdoctoral Transition Award to Promote Diversity (F99/K00): PAR-23-222

The logo for Advancing Research Careers (ARC) features a dark purple background on the left with the text 'Advancing Research Careers (ARC)' in white. On the right, there is a graphic of several curved lines in shades of teal and purple, transitioning from a solid color to a fine grid pattern.

Advancing Research Careers (ARC)

- Part of NIH's efforts to enhance diversity within the academic biomedical research workforce
- Supports transition from predoctoral research training to postdoctoral research and career development
 - F99: 1-2 years of support to complete PhD research training and identify postdoctoral mentor
 - K00: Up to 3 years of support

Advancing Research Careers (ARC) Structure

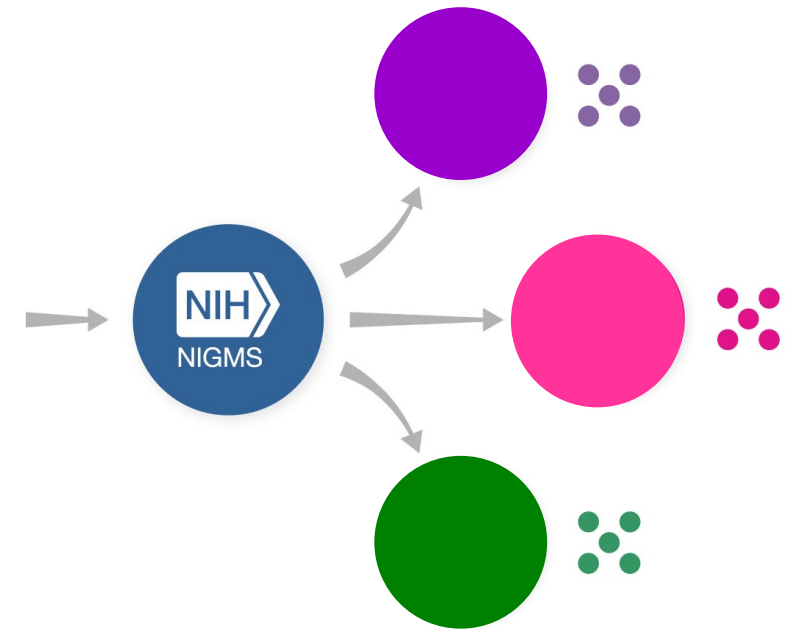
**Awards to organizations
(UE5) to provide mentoring
and career development**



**ARC F99/K00
applicants compete and
are selected by NIGMS**



**ARC F99/K00 scholars
participate in cohorts
managed by UE5 recipients**



Advancing Research Careers (ARC) - *dates*

Institutionally-Focused Research Education Award (UE5): PAR-23-221

Predocutorial to Postdoctoral Transition Award to Promote Diversity (F99/K00): PAR-23-222

The logo for Advancing Research Careers (ARC) features a dark purple square on the left containing the text 'Advancing Research Careers (ARC)' in white. To the right of the square is a graphic of several curved, overlapping lines in shades of teal and purple, creating a sense of motion and depth.

**Advancing
Research
Careers
(ARC)**

- UE5 first due date: January 29, 2024
(annual)
- F99 first due date: June 13, 2024
(3/year)

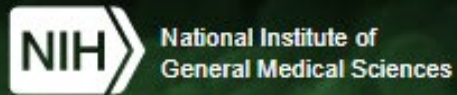
NIGMS Diversity Supplement Program



- Work with a Principal Investigator who has an active NIGMS research grant to submit a request for an administrative diversity supplement to the grant
- Use the parent funding announcement but be sure to contact the program contact first:
 - NIGMS-DSP@nigms.nih.gov
- NIGMS applications accepted on a rolling basis Oct 1 – May 31.

Visit our webpage:

<https://www.nigms.nih.gov/training/Pages/Home.aspx>



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